

## MEDIUM AND LARGE MAMMALS FOUND IN THE CENTRAL COUNTRY OF RIO GRANDE DO SUL, BRAZIL

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### ABSTRACT

We report a qualitative study of wild mammals of medium and large size found in a neighboring site, between the towns of São Sepé and Formigueiro, in the central country of the Rio Grande do Sul, 23 species were recorded through the efforts in the affords between the years 2009 to 2011 through direct and indirect observations. Of the species recorded, 10 are listed as endangered in the country, this site as an imports one for conservation (purposes) in the region.

**Keywords:** inventory, mammals, São Sepé, Formigueiro, Pampa biome.

### MAMÍFEROS DE MÉDIO E GRANDE PORTE ENCONTRADOS EM UMA ÁREA NA REGIÃO CENTRAL DO RIO GRANDE DO SUL, BRASIL

### RESUMO

Apresentamos aqui um estudo qualitativo dos mamíferos silvestres de médio e grande porte encontrados em uma área limítrofe, entre os Municípios de São Sepé e Formigueiro, região central no estado do Rio Grande do Sul. Foram registradas 23 espécies através dos esforços em campo entre os anos de 2009 a 2011 através de observações diretas e indiretas. Das espécies registradas, 10 são citadas como ameaçadas no Estado, caracterizando assim como uma área importante para conservação na região.

**Palavras –chaves:** Inventário, Mamíferos, São Sepé, Formigueiro, Bioma pampa.

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## INTRODUCTION

Brazil is considered one of the countries with the highest species diversity of mammals in the world (REIS et al., 2011), with 701 bird species recorded (PLAGIA et al., 2012), however as the intensification of field affords there is a tendency for new records (REIS et al., 2011). This group plays a key role in maintaining the balance of ecosystems, engaging in more distinct ecological processes (JÚNIOR and KÖHLER, 2009). The mammalian fauna of the Rio Grande do Sul is expressive, thanks to its physiographic position (SILVA, 1994), with about 170 species (GONZÁLEZ and MARIN, 2004), and the vast majority are nocturnal, which makes studies with direct visualization very difficult (SILVA, 1994).

Some recent studies in Rio Grande do Sul State: Kasper et al., (2007), Kerber et al., (2008), Santos et al., (2008), Junior and Köhler (2009), Peters et al., (2010), Cademartori et al., (2011), Junges and Cademartori (2012), Kasper et al., (2012), Pires and Cademartori (2012) and Oliveira et al., (2013) feature lists and records of mammals complementing and highlighting their patterns of occurrence and distribution in the Rio Grande do Sul. But, surveys of this group are still considered scarce, being that wild species are poorly known (BEHR and FORTES, 2002), which, in turn, has greatly contributed to its demise (SILVA, 1994), characterizing them in endangered level, a great diversity of species in this group (FONTANA et al., 2003).

This study presents a list of the mammals of medium to large size, found in an area between the town of Sao Sepe and Formigueiro in the central country of the Rio Grande do Sul.

## MATERIALS AND METHODS

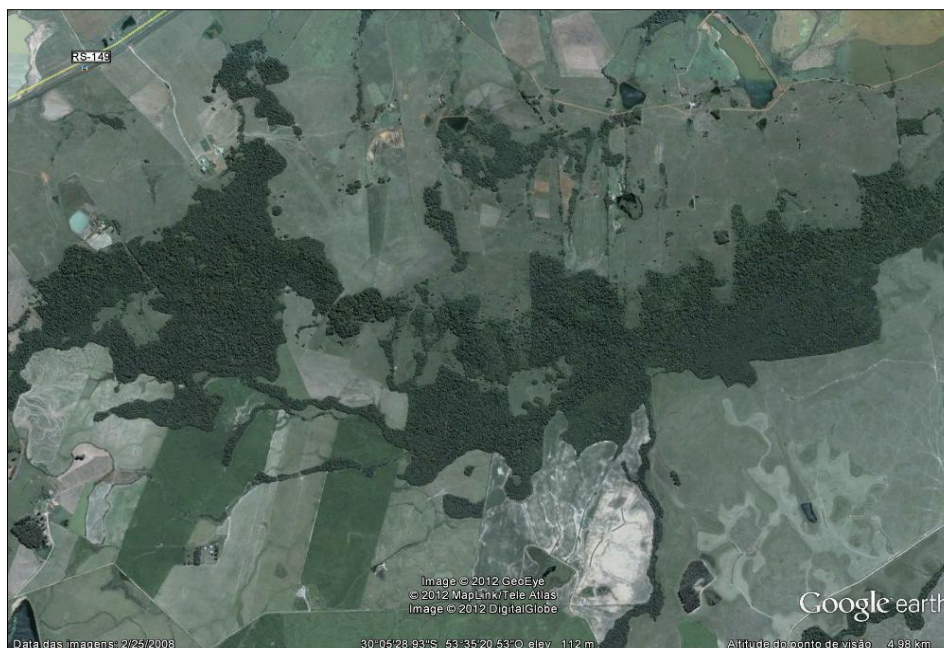
We conducted a qualitative study from December 2009 to the same month in 2011, inventorying the mammalian fauna of medium and large size found in a forest fragment and its surroundings (30°05'35", 3°S 53°36'22", 9°W), between the currencies of the towns of São Sepé and Formigueiro, central country of the Rio Grande do Sul (Figura 1). The region is characterized by slightly wavy provide relief (BRASIL, 1973), inserted in Pampa Biome with natural grassland vegetation and native forests (IBGE, 2004).



**Figura 1:** Point location data collection between the currencies of the Municipalities of Sao Sepé and Formigueiro, Central Region, RS.

The study site (Figure 2), is popularly known as Ponta bush retreat and Good, respectively. According to Corrêa et al., (2010), the fragment is considered a riparian forest with about 450 hectares, and its surroundings, affords and are characterized by swamps, where they are used for agriculture (rice and soybean) and livestock (SILVA, et al., 2011).

Was performed to collect data monthly output during daytime, six hours of effort, walk free on demand, between the forest and its surroundings, seeking direct contact of the specimens (looking), and indirect (traces, feces and carcasses), according Peters et al., (2010) searches for traces occurred randomly and complementary. A camera trap machine was used during the 12 months of 2011, installed on tracks in random fragment, active for 96 hours each month. For the identification and comparison of species in direct and indirect contact we used the following guidebooks: Silva (1994), Becker and Dalponte (1999), Oliveira and Cassaro (2005), Mamede and Alho (2008).



**Figura 2:** Satellite image of the study site. source: Google Earth, access in December 2012.

The nomenclature was followed as Plagia et al., (2012), however, *Lepus europaeus* is an introduced species in the State, the country has adapted (SILVA, 1994), being considered your record on this list, where we follow the nomenclature according to Reis et al., (2011) for that species. The conservation status of the species as follows Fontana et al., (2003). The characterization of the diet was determined by Silva (1994), Mamede and Alho (2008) and Plagia et al., (2012).

## RESULTS AND DISCUSSION

Through the methods used included 23 species were recorded in 7 orders, distributed in 16 families. Of the 10 recorded species are considered endangered in the State (FONTANA et al., 2003), they are: in the category of vulnerable, *Tamandua tetradactyla*, *Alouatta guariba*, *Leopardus geoffroyi*, *Leopardus wiedii*, *Puma yagouaroundi*, *Lontra longicaudis*, *Mazama gouazoubira*, *Dasyprocta azarae* and endangered: *Cuniculus paca* and *Leopardus braccatus* the latter species was also reported in Silva et al., (2010) in the country.

The presence of endangered species record evidence relevant data on the conservation status of the country. As Corrêa et al., (2010) the forest region of study harbors a small population of *Crypturellus noctivagus* recently rediscovered, this wild bird that was considered extinct in the state for more than three decades (BENCKE et al., 2003).

With continued study and monitoring of the area probably other species will be recorded. The region should be considered a place of importance for the preservation of wild fauna and flora in Pampa Biome. Work aimed at environmental education exposing information about the group fauna are important measures of awareness and conservation.

**Table-1:** List of species recorded. The species were grouped according to the contact record: (1) eye contact; (2) Traces, feces or carcass and (3) Camera trap. Diet: (Ca) Carnivore, (Fr) Frugivore, (Fo) Folivore, (Gr)

Granivore, (Hb) Herbivore, (In) Insectivore, (On) Omnivore. The conservation status of the species: (VU) vulnerable, (DE) In Danger of Extinction.

Species	Common Name	Record	Diet	Status
<b>Didelphimorphia</b>				
DIDELPHIDAE				
<i>Didelphis albiventris</i>	White-eared opossum	1,2,3	Fr/On	
<b>Pilosa</b>				
MYRMECOPHAGIDAE				
<i>Tamandua tetradactyla</i>	Southern tamandua	1	In	VU
<b>Cingulata</b>				
DASYPODIDAE				
<i>Dasybus hybridus</i>	Southern Long-nosed Armadillo	1,2,3	In/On	
<i>Dasybus novemcinctus</i>	Nine-banded Armadillo	1,2,3	In/On	
<i>Euphractus sexcinctus</i>	Six-banded Armadillo	1,2	In/On	
<b>Primates</b>				
ATELIDAE				
<i>Alouatta guariba</i>	Brown Howler Monkey	1,2	Hb/Fo	VU
Lagomorpha				
LEPORIDAE				
<i>Lepus europaeus</i>	Brown hare	1,2	Hb	
<b>Carnivora</b>				
FELIDAE				
<i>Leopardus braccatus</i>	Pampas cat	1,2	Ca	DE
<i>Leopardus geoffroyi</i>	Geoffroy's cat	1,2,3	Ca	VU
<i>Leopardus wiedii</i>	Margay	1,2,3	Ca	VU
<i>Puma yagouaroundi</i>	Jaguarundi	1	Ca	VU
CANIDAE				
<i>Cerdocyon thous</i>	Crab-eating fox	1,2,3	In/On/Ca	
<i>Lycalopes gymnocercus</i>	Pampas Fox	1,2,3	In/On/Ca	
MUSTELIDAE				
<i>Calictis cuja</i>	Grisson	1,2	Ca	
<i>Lontra longicaudis</i>	Neotropical Otter	1,2	Ca	VU
MEPHITIDAE				
<i>Conepatus chinga</i>	Hog-nosed Skunk	1,2,3	In/Ca	
PROCYONIDAE				
<i>Procyon cancrivorus</i>	Crab-eating raccoon	2,3	On/Ca	
<b>Artiodactyla</b>				
CERVIDAE				
<i>Mazama gouazoubira</i>	Gray brocket deer	1,2,3	Hb	VU
<b>Rodentia</b>				
CAVIIDAE				
<i>Hydrochoerus Hydrochaeris</i>	Capybara	1,2,3	Hb	
CUNICULIDAE				
<i>Cuniculus paca</i>	Paca	2,3	Fr/Fo	DE
DASYPROCTIDAE				
<i>Dasyprocta azarae</i>	Agouti	1,3	Fr/Fo	VU
ERETHIZONIDAE				
<i>Sphiggurus villosus</i>	Lesser tree-porcupine	1,2	Fr/Gr/Fo	
MYOCASTORIDAE				
<i>Myocastor coypus</i>	Coypu	1	Hb/Fo	

## CONSIDERATIONS

Because of the diversity of wild mammals found in the country with the degree of threat, it establish conservation measures in place, proposals aimed at environmental

preservation and ecological studies on groups that are there, characterizing the region as an important area for conservation in the Rio Grande do Sul.

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